CLINICAL & OCCUPATIONAL PULMONARY ASSOCIATES, LLC

St. Clair Hospital -1000 Bower-Hill Road, Suite 211 Pittsburgh, Pennsylvania 15243-1899

Gregory J. Fino, MD, FCCP

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January 22, 2007

Michael C. Colville
Assistant U.S. Attorney
U.S. Department of Justice
U.S. Post Office & Courthouse
700 Grant Street
Suite 4000
Pittsburgh, PA 15219

RE: Kenneth Hill v. United States

C.A. No. 05-160E SSN: 579-92-9278 DOB: 7/17/62 OIME: 12/21/06

Dear Attorney Colville:

I examined Mr. Hill on December 21, 2006.

Patient Profile

Mr. Hill was born in 1962 and was 44 years old. His medications included:

- 1. Medication for a rash; he has been on the medication for about a year, but it has not taken the problem away.
- 2. Cortisone cream for the rash.
- 3. Eye drops for burning and itchy eyes this does help.
- 4. Breathing treatments about once a week these work "so-so."

He has no allergies, and he never smoked.

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Occupational History

Mr. Hill's job was making furniture from 2001 through 2005, and it was a very dusty job. He denied any skin problems, eye problems or lung problems before 2001. He believes he is about 30% better now that he is not working at the facility. While there, he cut Micore Board and particle board approximately three times per week. He did not have a respirator but was provided paper masks. He believed that the ventilation was not good. He had to use an air hose to remove the dust from his body and eye irrigation to wash out his eyes.

He was also exposed to Lokweld every day, and it created an odor. He also used a compound to remove extra Lokweld from the surfaces of the laminate.

He started to note dizziness, rash and shortness of breath within the first few months. He also developed severe headaches.

He now has shortness of breath, and he can no longer play basketball as he did in the past. He is limited in what he can do because of his breathing.

He does not complain of chest pain. He does admit to daily cough and mucus, and he does wheeze. There is no orthopnea or paroxysmal nocturnal dyspnea.

Past Medical History

His past medical history is significant for a gunshot wound of the left leg.

He has no history of pneumonia, tuberculosis, emphysema, asthma, bronchitis, bronchiectasis, or frequent colds. There is no history of fractured ribs.

Family History

There is no family history of malignancy.

Review of Systems

Neurologic:

No headaches or seizures

HEENT:

No chronic sinus problems

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GI:

No history of chronic gastrointestinal disease

CVS:

No history of cardiovascular disease

GU:

No chronic genitourinary problems

MS:

No chronic musculoskeletal problems

Endocrine:

No diabetes or thyroid disease

Physical Examination

General:

Well-developed, well-nourished black man in no acute

distress, oriented X 3

Heart Rate:

64

Blood Pressure:

122/82

Respiratory Rate:

12

Height:

73" without shoes

Weight:

223 lbs without shoes

Skin/Nails:

No cyanosis, clubbing, or edema

Neck:

Supple with a midline trachea; no thyromegaly

HEENT:

Unremarkable. There was no conjunctivitis nor any

evidence of external eye irritation.

Lungs:

Clear to auscultation and percussion on a tidal volume

breath and a forced expiratory maneuver without

wheezes, rales, rhonchi, or rubs

Heart:

Normal S1 and S2 without murmurs, gallops, or rubs

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Abdomen:

No organomegaly

Peripheral Pulses:

2+ and equal

Extremities:

Excoriations on his legs. A few papules (pimples) on

his back and his abdomen.

Edema:

Negative

Neurological Exam:

Intact

Chest X-Ray

A two-view chest x-ray was performed in conjunction with this examination. The chest x-rays were compared to the revised 2000 ILO classification films.

I have also received for review a Quality 1 two-view chest x-ray dated 10/18/04 performed by DBI Radiology, Inc. (according to the accompanying report), and I have compared this chest x-ray as well to the revised 2000 ILO classification films.

There were no pleural and no parenchymal abnormalities consistent with an occupationally acquired pneumoconiosis, and I classified both of the chest x-rays as 0/0.

Both of the above-referenced films were normal.

Pulmonary Function Testing

The American Thoracic Society, in conjunction with the European Respiratory Society, has published a follow-up article to their 1991 article on selection of reference values and interpretative strategies in pulmonary function testing.

The original 1991 article is entitled <u>Lung Function Testing</u>: <u>Selection of Reference</u> <u>Values And Interpretative Strategies</u> (AM REV RESPIR DIS 1991; 144:1202-1218). The more recent article is entitled <u>Interpretative Strategies for Lung Function Tests</u> (EUR RESPIR J 2005; 26:948-968).

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The following consensus recommendations have been issued in the 2005 consensus statement:

- ✓ If the patient's age or height is outside the limits of the reference population, a statement in the interpretation should indicate that an extrapolation has been made.
- The practice of using 80% as a fixed value for the lower limit of normal can lead to important errors when interpreting lung function in adults. The practice of using 0.70 as a lower limit of the FEV1/FVC ratio results in a significant number of false positive results in males aged greater than 40 years and females greater than 50 years, as well as in a risk of over diagnosis of chronic obstructive pulmonary disease in asymptomatic elderly never smokers.
- ✓ Volume corrections should be made for African-Americans and Hispanics when measuring spirometry. Values for lung volumes are, on average, 12% lower in African-Americans than in Caucasians.
- ✓ Recommended spirometric reference equations come from the National Health and Nutrition Examination Survey (NHANES III) published in 1999 (AM J RESPIR CRIT CARE MED 1999; 159:179-187).
- ✓ Recommended lung volume reference equations were published in 1995 (EUR RESPIR J 1995; 8:492-506).
- ✓ A single set of diffusing capacity reference values could not be recommended. There were two commonly used equations referenced, one of which has been utilized since its publication in 1981 (AM REV RESPIR DIS; 123:185-189).

The earlier consensus statement also recommended abandoning the 80% cut off as normal and the 70% cut off for the FEV1/FVC. The new 2005 statement paper goes one step further and has recommended utilization of one set of reference equations for spirometry, one for lung volumes and then one of two for the diffusing capacity. Having reviewed these new recommendations and having reviewed the source material, I believe that it is medically reasonable to follow the recommendations in the statement papers.

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I have included with the pulmonary function studies that are performed in conjunction with my examinations a new summary for the spirometry, lung volumes and diffusing capacity. This summary utilizes the above noted recommendations for the spirometry, lung volume and diffusing capacity reference equations.

Spirometry

The spirometry was invalid because of a premature termination to exhalation and a lack of reproducibility in the expiratory tracings. There was also a lack of an abrupt onset to exhalation. The values recorded for this spirometry represent at least the minimal lung function that this man could perform and certainly not this man's maximum lung function. (References: (1) Standardization of Spirometry. A.R.R.D. 1987; 136:1285-1298. (2) ATS Statement-Snowbird Workshop on Standardization of Spirometry. A.R.R.D. 1979; 119:831-838. (3) Statement on Spirometry. Chest 1983; 83:547-550. (4) ATS/ERS Task Force: Standardization of Lung Function Testing - Standardization of Spirometry. Eur Respir J 2005; 26: 319-338.)

Lung Volumes

The TLC was normal. The RV and RV/TLC were elevated.

Diffusing Capacity

The diffusing capacity was normal.

Oxygen Saturation

Normal

Carboxyhemoglobin Level

Normal

Laboratory Results

Liver function studies, renal studies, electrolytes, and a CBC were all normal.

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Medical Record Review

In conjunction with this evaluation, I reviewed the following information:

- 1. Background information which included:
 - The Microbac Indoor Airy Quality Survey dated 7/31/01.
 - The Declaration of Michael Salerno, dated 1/19/05, with detailed information regarding the ventilation system.
 - The McKean timeline, which identified when and where the Plaintiff worked within the UNICOR Factory.
 - Material Safety Data Sheets for Micore Board and Lokweld.
 - The OSHA Inspection Report and supporting documentation.

Micore Board is a man-made product which contains man-made vitreous fiber, expanded perlite, starch, recycled paper, kaolin and crystalline silica.

Lokweld is a sprayed grade adhesive used for laminate. It contains acetone, toluene, hexane isomers, and N-hexane.

In a letter dated August 20, 2003, Mr. Stranahan (from OSHA) discussed the results of air monitoring to evaluate worker exposures to airborne dust concentrations. He stated that the "results show that no worker's exposure exceeded 10% of the relevant exposure limit." He did recommend a number of steps that could be voluntarily taken to eliminate or further reduce the workers' exposure to dust. The OSHA study found no respirable silica.

- 2. A copy of the Amended Complaint filed on behalf of the Plaintiff.
- 3. The Declaration of Stephen Housler, Safety Manager, dated 1/25/05.
- 4. The Declaration of Martin Sapko, Factory Manager, dated 1/25/06.

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- 5. The Declaration of Douglas S. Goldring, Assistant General Counsel, dated 2/2/06, including an attachment identified as a true and correct copy of the Plaintiff's medical records through January 2006.
- 6. The Plaintiff's Affidavit dated 3/13/06.
- 7. The deposition transcript of Kenny Hill dated 11/1/06.
- 8. In addition to the information noted above, I also had an opportunity to review miscellaneous records on CD ROMS that accompanied the files forwarded to my office.

Diagnoses

I have reached the following diagnoses:

- 1. Normal Pulmonary Examination
- History of a rash and irritation of the eyes 2.

Discussion

I find no evidence of a respiratory impairment or disability. This man did not give a maximum effort on the spirometry. The values for the FVC and FEV1 underestimate his true lung function. If this man really had values that low, he would no doubt require oxygen and would not be able to ambulate more than 50 feet. Certainly, historically, he does not have symptoms comparable to the lung function studies; therefore, this is another reason why the lung function studies for the FVC and FEV1 underestimate his true lung function. However, I would also point out that the diffusing capacity was normal, indicating no scarring or fibrosis of the lungs and no difficulty transferring oxygen from the air sacs to the bloodstream with exertion.

The determination of pulmonary impairment and subsequent disability has been extensively researched in the American medical literature. In the late 1980s, there was a worldwide conference on the assessment of respiratory impairment sponsored by the National Institutes of Health. This was published in the American Review of Respiratory Disease in 1988 (ARRD 1988; 137:1505-1510). All of the participants agreed that symptoms of shortness of breath on effort and exercise intolerance were not reliable predictors of impairment. There was also agreement that a physical examination was not

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helpful in measuring pulmonary impairment. Lung function tests, however, were essential in assessing whether or not impairment was present and essential in rating its severity. Dr. Hans Weill commented that "resting lung function tests, usually spirometry, all are the cornerstone in the clinician's assessment of respiratory impairment, and provided they are technically sound, are generally believed to be adequate for ascertaining the presence of respiratory limitation. Likewise, it is generally believed that exercise limitation is not likely to be present in the face of normal or marginal resting lung function."

Similar statements have been issued by the American Thoracic Society and the American Medical Association with respect to guidelines for the evaluation of respiratory impairment. It is of utmost importance that valid lung function studies be performed. An invalid study does not represent the patient's maximum pulmonary capacity and cannot be used to assess impairment or disability. An invalid pulmonary function study indicates poor patient effort. The values recorded can only represent the minimum lung function of the patient.

There is no evidence of either chronic or accelerated silicosis based on the normal chest films.

This patient should have no fear of contracting silicosis in the future. First of all, there were no measurable levels of respirable silica noted by OSHA. Furthermore, it is well documented in the medical literature that at least 20 years of exposure to dust that is measurable and above the PEL is required before chronic silicosis occurs.

If this were my patient, I would not follow him for the subsequent development of silicosis, and I would assure him that he has no reason to worry about developing silicosis in the future.

I find no evidence of any chronic condition with reference to his eyes or throat or skin. Although he has complaints referable to these systems, I find no objective evidence of any abnormality.

From a respiratory standpoint, I do not find any objective evidence of any respiratory impairment or disease process of the pulmonary system. He did not give a maximum effort on the spirometry. However, the TLC and the diffusing capacity were normal.

He has numerous complaints regarding a rash and eye irritation. Of course, dermatology and ophthalmology are not my specialties. He states that there was a lot of dust where he

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worked. Certainly he may have sustained some irritation of the skin and the eyes as a result of the dusts. However, I found no evidence of any eye irritation at the time I examined him.

There were excoriations on his legs which suggest itching. However, I found no evidence that this was related to his exposures at work.

Based on the objective evidence that I have reviewed, I do not find any objective evidence of a respiratory impairment or any pulmonary illness related to his work exposures.

Conclusions

My conclusions have been reached with a reasonable degree of medical certainly. I find no evidence of any chronic condition of the lungs or pulmonary system related to Mr. Hill's alleged exposures. I find no evidence of a chronic condition with reference to the skin, eyes or nose.

Sincerely,

Gregory J. Fino, M.D., F.C.C.P.

GJF/kms

CLINICAL AND OCCUPATIONAL PULMONARY ASSOCIATES

GREGORY J. FINO, M.D., F.C.C.P.

PREDICTED VALUES BASED ON THE 2005 SPIROMETRY RECOMMENDATIONS Recommendations from the ATS/ERS: INTERPRETATIVE STRATEGIES FOR LUNG FUNCTION TESTS EUR RESPIR J 2005; 26:948-968.

Name	Hill, Kenneth		MD	Fino	
At	185.4	cm	Date	12/21/2006	
Age	44	years	Race	African American	

SPIROMETRY PREDICTED VALUES USING THE NHANES III STUDY

Spirometric Reference Values from a Sample of the General U.S. Population AM J RESPIR CRIT CARE MED 1999: 159:179-187

		Al	AT 9 KESLIK	CKII CAI	CE MED 199.	7, 137.17	-10/		
TEST	PATIENT	PRED	%PRED	LLN	LLN%	POST	%PRED	BD %	
FVC	3.82	4.77	80	3.75	79	3.97	83	4	
FEV1	1.31	3.86	34	2.96	77	1.87	48	43	
						•			
FEV1/FVC	34	81		71		47			
FEF25-75	0.98	3.88	25	1.94	50	1.54	40	57	

REFERENCE VALUES FOR RV,FRC AND TLC - ATS WORKSHOP ON LUNG VOLUME MEASUREMENTS OFFICIAL STATEMENT OF THE EUROPEAN RESPIRATORY SOCIETY EUR RESPIR J 1995; 8:492-506

L.V.	PATIENT	PRED	%PRED	LLN	LLN%	ULN	ULN%	
TLC	6.69	6.81	98	5.60	82	9.10	134	
RV	2.99	1.91	157	1.32	69	2.84	149	
FRC	3.71	3.25	114	2.37	73	4.68	144	
RV/TLC%	45	31	144	20	66	42	134	

STANDARDIZED SINGLE BREATH NORMAL VALUES FOR THE DLCO AM DEV DESPIP DIS 1081-123-185_180

			AIVI NE V	KESI IK D	1,1001,1	143.103-107
DLCO	PATIENT.	PRED	%PRED	LLN	LLN%	
DLCO	29.49	36.21	81	29.00	80	
DL/VA	5.21	4.91	106	3.68	75	

Prebronchodilator

FVC FEV1 FEV1/FVC FEF25-75

Post Bronchodilator

FVC FEV1

TLC

Lung Volumes FRC

RV RV/TLC **Diffusing Capacity**

DLCO DL/VA IMPRESSION

PF	Œ	POST				
FVC	3.82	FVC	3.97			
FIEVI	1.31	EVE\VI	1.87			
DAMINDAG	34	0000254/5	1.54			
FEF25-75	0.98	PR	E			
IILO	6.69	RV/TLC%	45			
RV	2.99	DLCO	29.49			
FRC	3.71	DL/VA	5.21			

Pulmonary Function Report

1000 Bower Hill Rd. Pittsburgh, PA, 15243

Phone: 412-942-2000

Fax: 412-942-2024

Name Hill, Kenny	ID: 88-1-	I-20 D.O.B.:07	//17/1962 Date:	12/21/2006
Tech: Diane Smith, CRT	Height: 73.00	Age: 44	Room:	Outpatient
•	Weight: 223.	-	ale Race:	Black
Doctor: G. Fino, M.D.	WCIgnt. 225.			

Diagnosis: S.O.B.

Dyspnea: After severe exertion

Cough: Productive

Wheeze: Frequent

Theo Prod: Never Smoked

Yrs Smk:

Pks/Day:

Yrs Quit:

Medications:

Pre Test Comments:

Post Test Comments:

Good patient effort and cooperation. Patient met ATS standards. Albuterol MDI 2

puffs given PFT Authors DLCO (Crapo), FVC (Nhanes III), FRC (ECCS)

	Pre	-Bronch		Post-Bronch			
	<u>Actual</u>	<u>Pred</u>	%Pred	<u>Actual</u>	%Pred	%Chng	
SPIROMETRY	 -						
FVC (L)	3.82	4.77	80	3.97	83	4	
FEV1 (L)	1.31	3.86	34	1.87	48	43	
FEV1/FVC (%)	34	81	42	47	58	38	
FEF 25% (L/sec)	1.27	8.50	15	2.00	24	58	
FEF 75% (L/sec)	0.69	1.93	36	1.41	73	106	
FEF 25-75% (L/sec)	0.98	3.88	25	1.54	40	58	
FEF Max (L/sec)	1.33	9.83	14	2.12	22	59	
FIVC (L)	1.97			3.12		58	
FIF Max (L/sec)	1.72			1.71		-1	
LUNG VOLUMES		- 4	60				
SVC (L)	3.70	5.47	68				
IC (L)	2.98	3.69	81				
ERV (L)	0.72	1.78	41				
FRC (N2) (L)	3.71	3.86	96				
RV (N2) (L)	2.99	2.08	144				
TLC (N2) (L)	6.69	7.55	89				
RV/TLC (N2) (%)	45	28	159				
Washout Time (min)	1.25						
DIFFUSION							
DLCOunc (ml/min/mmHg)	29.49	36.37	81				
DLCOcor (ml/min/mmHg)	20,10	40.47	0.2				
• • • • • •	5.21	6.20	84				
DL/VA (ml/min/mmHg/L)	5.66	7.55	75				
VA (L)	3.55	1.55	, ,				
IVC (L)	3.33						
BHT (sec)					•		

Pulmonary Function Report

1000 Bower Hill Rd. Pittsburgh, PA, 15243

Phone: 412-942-2000

Fax: 412-942-2024

Hill, Kenny Name Diane Smith, CRT Tech:

ID: 88-14-20 Height: 73.00

D.O.B.:07/17/1962 Age: 44

Room: Outpatient Black Race:

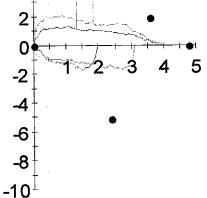
Date:

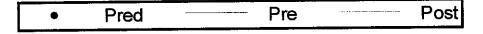
12/21/2006

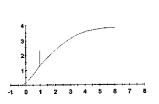
Weight: 223.00

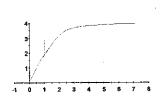
Male Sex:

Doctor: G. Fino, M.D.









Pulmonary Function Report

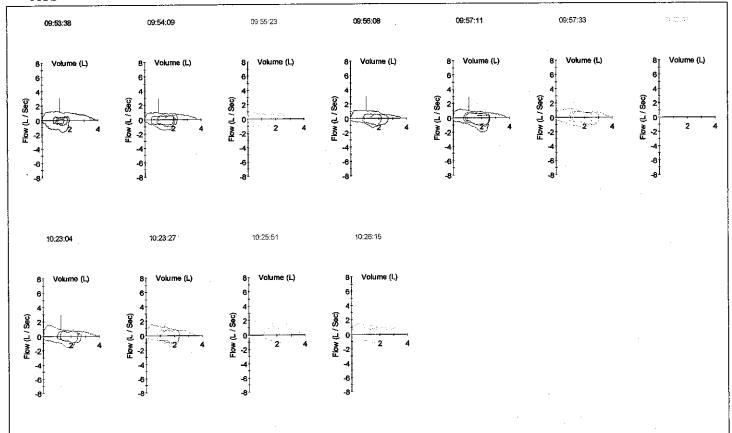
1000 Bower Hill Rd. Pittsburgh, PA, 15243

Phone: 412-942-2000

Fax: 412-942-2024

Name	Hill, Kenny	ID:	88-14-20	D.O.B	.:07/17/1962	Date:	12/21/2006
Tech:	Diane Smith, CRT	Height:	73.00	Age:	44	Room:	Outpatient
Doctor:	G. Fino, M.D.	Weight:	223.00	Sex:	Male	Race:	Black

Time	Select	I-Lp	Test Mode	ATS						
		•			FVC	FVC	FEV1	FEV1	FEV1/FVC	FEF 25-75%
					absolute	% p/c	absolute	% p/c	absolute	absolute
Pre										
09:53:38	*				3.81	80	1.31	34	34	0.98
09:57:33	*				3.82	80	1.25	32	33	0.81
09:57:11	*				3.78	79	1.14	29	30	0.79
09:56:08	*				3.59	75	1.13	29	32	0.75
09:54:09	*				3.69	77	1.01	26	27	0.76
09:55:23	*				3.73	78	0.89	23	24	0.64
ATS			Pre/Baseline		3.82	80	1.31	34	34	0.98
Post									-	
10:25:51	*				3.94	+3	1.87	+43	48	1.54
10:26:15	*				3.97	+4	1.36	+4	34	0.96
10:22:41	*				3.38	-12	1.73	+32	51	0.88
10:23:04	*				3.78	-1	1.31	+0	35	0.78
10:23:27	*				3.55	-7	1.35	+3	38	0.84
ATS			Post		3.97	+4	1.87	+43	47	1.54



Pulmonary Function Report

1000 Bower Hill Rd. Pittsburgh, PA, 15243

Phone: 412-942-2000

Fax: 412-942-2024

Name Hill, Kenny Tech: Diane Smith, CRT Doctor: G. Fino, M.D.

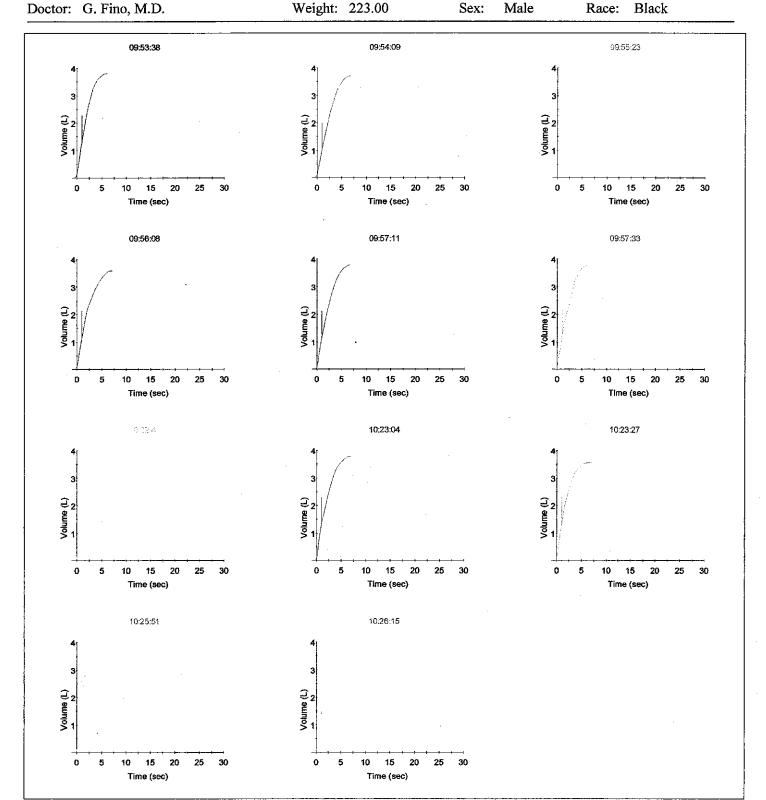
ID: 88-14-20 Height: 73.00 Weight: 223.00

D.O.B.: 07/17/1962 Age: 44

Room: Outpatient Black Race:

12/21/2006

Date:



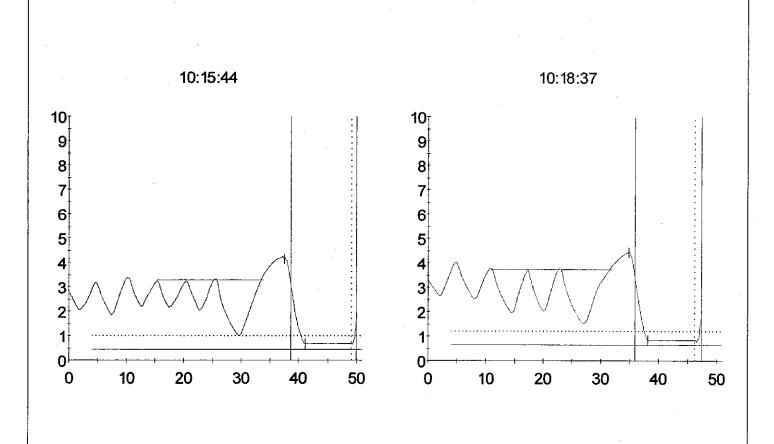
Pulmonary Function Report

1000 Bower Hill Rd. Pittsburgh, PA, 15243

Phone: 412-942-2000 Fax: 412-942-2024

Name:	Hill, Kenny	ID:	88-14-20	D.O.B	.:07/17/1962	Date:	12/21/2006
Tech:	Diane Smith, CRT	Height:	73.00	Age:	44	Room:	Outpatient
Doctor:	G. Fino, M.D.	Weight:	223.00	Sex:	Male	Race:	Black

Time	Select	RpLp	Test Mode	Codes	Protocol					•
						DLCOunc	DLCOunc	DLCOcor :	DLCOcor	DL/VA
					•	absolute	% p/c	absolute	% p/c	absolute
Predicted						36.37		40.47		6.20
Pre	•									
10:12:29				Breath	Jones-Mea	27.85	77			5.09
10:15:44	*		•		Jones-Mea	28.47	78			5.25
10:18:37	*				Jones-Mea	30.52	84			5.18
AVG			Pre/Baseline			29.49	81			5.21
Post										



Pulmonary Function Report

1000 Bower Hill Rd. Pittsburgh, PA, 15243

Phone: 412-942-2000

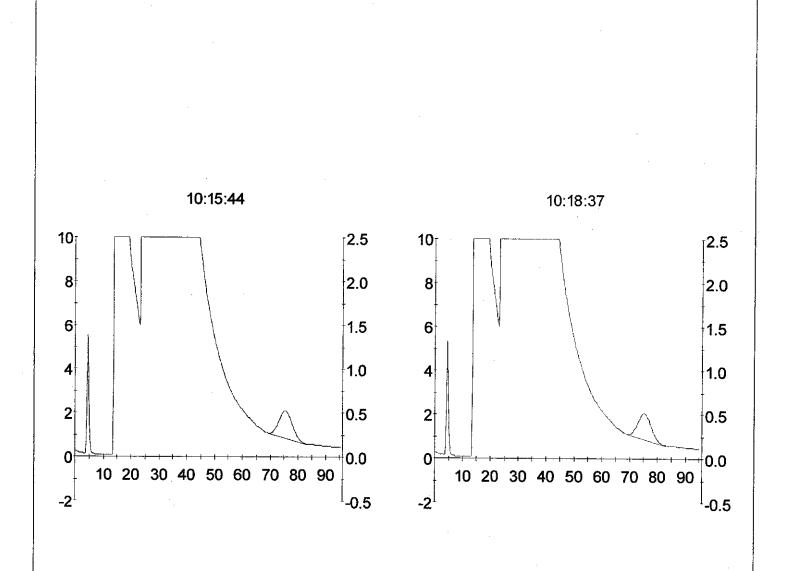
Fax: 412-942-2024

Name: Hill, Kenny
Tech: Diane Smith, CRT
Doctor: G. Fino, M.D.

ID: 88-14-20 Height: 73.00 Weight: 223.00 D.O.B.: 07/17/1962 Age: 44

Date: 12/21/2006 Room: Outpatient

Sex: Male Race: Black



Pulmonary Function Report

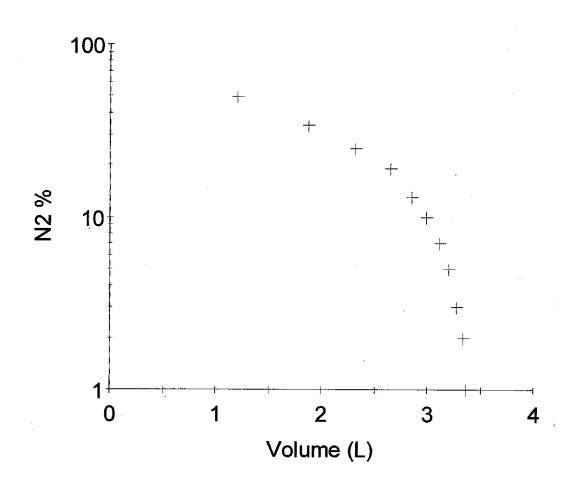
1000 Bower Hill Rd. Pittsburgh, PA, 15243

Phone:	412-	942-2000	Fax: 412-942-2024

Name:	Hill, Kenny	ID:	88-14-20	D.O.B.	:07/17/1962	Date:	12/21/2006
Tech:	Diane Smith, CRT	Height:	73.00	Age:	44	Room:	Outpatient
Doctor:	G. Fino, M.D.	Weight:	223.00	Sex:	Male	Race:	Black

Time	Select	RpLp	Test Mode					
				FRC (N2) absolute	FRC (N2) % p/c	RV (N2) absolute	RV (N2) % p/c	TLC (N2) absolute
Predicted				3.86	•	2.08		7.55
Pre								
10:03:01				3.06	79	2.34	113	6.04
10:06:52	*			3.71	96	2.99	144	6.69
AVG			Pre/Baseline	3.71	96	2.99	144	6.69
Post		•						





HILL, KENNETH

MR#:881420 SEX:M AGE:44Y BIRTH:07/17/1962

DOCTOR: FINO, GREGORY J., M.D.

1000 BOWER HILL RD. SUITE 211

PITTSBURGH PA 15243

ST CLAIR HOSPITAL LABORATORY

1000 BOWER HILL ROAD

PITTSBURGH, PA 15243

MARTHA R. CLARKE, MD, MEDICAL DIRECTOR

H6663 COLL: 12/21/2006 10:50 REC: 12/21/2006 10:53

COMP METABOLIC			
SGOT/AST	33	[0 =0]	/-
SGPT/ALT	45	[0-50]	U/L
ALKALINE PHOSPHAT		[0-50]	U/L
BILIRUBIN TOTAL	1.2	[43-122]	U/L
PROTEIN	@8.5	[0.2-1.3]	MG/DL
ALBUMIN	4.5	[6.0-8.4]	G/DL
CALCIUM	10.0	[3.5-5.0]	G/DL
GLUCOSE	93	[8.0-10.2]	MG/DL
BUN	8	[70-110]	MG/DL
CREATININE	1.0	[8-25]	MG/DL
GFR (CAUCAS/OTHER)	>59	[0.6-1.5]	MG/DL
GFR (AFRICAN AMER)	>59	[>59] [>59]	ML/MIN
SODIUM	139	[233-145]	ML/MIN
POTASSIUM	4.2	[3.5-5.0]	MMOL/L
CHLORIDE	103	[96-108]	MMOL/L
CO2	27	[22-30]	MMOL/L
ANION GAP	9	[8-16]	MMOL/L
		[0-10]	MMOL/L
CBC HEMOGRAM			
WBC	5.6	[4.8-10.8]	K/UL
RBC	5.40	[4.7-6.2]	M/UL
HEMOGLOBIN	16.1	[14.0-17.0]	GM/DL
HEMATOCRIT	46.3	[42.0-52.0]	%
MCV	85.7	[78.0-94.0]	FL
MCH	29.8	[25.0-35.0]	PG
MCHC	34.8	[31.0-36.5]	G/DL
RDW	13.6	[12.9-14.9]	8
PLATELET	260	[130-460]	K/UL
MPV	@6.8	[7.4-10.4]	FL
DIFF, ELECTRONIC			
ABSOLUTE NEUTROPH	3.1	[1.5-6.6]	K/UL
ABSOLUTE LYMPHOCY	2.2	[1.5-3.5]	K/UL
ABSOLUTE MONOCYTE	0.3	[0-0.9]	K/UL
ABSOLUTE EOSINOPH	0.1	[0-0.6]	K/UL
ABSOLUTE BASOPHIL	0.0	[0-0.1]	K/UL
NEUTROPHIL	55.8	[40-75]	8
LYMPHOCYTE	36.4	[20-40]	ક
MONOCYTE	5.8	[1-8]	9
EOSINOPHIL	1.5	[0-5]	&
BASOPHIL	0.5	[0-1]	8
		_	

PAGE:1

FINO, GREGORY J., M.D. 1000 BOWER HILL RD. SUITE 211 PITTSBURGH PA 15243 1TIME

* = CRITICAL VALUE

@ = OUTSIDE NORMAL RANGE

END OF REPORT

CLINICAL & OCCUPATIONAL PULMONARY ASSOCIATES, LLC

Gregory J. Fino, MD, FCCP

St. Clair Hospital 1000 Bower Hill Road, Suite 211 Pittsburgh, Pennsylvania 15243-1899

Telephone (412) 942-2025
Fax (412) 942-2032
Email gregory.fino@stclair.org

PATIENT HILL, KENNETH

DATE 12-31-06

PULSE OXIMETRY

97% ISA

CC = 3 ppm

*○. ⁶*О СОНЬ

CLINICAL & OCCUPATIONAL PULMONARY ASSOCIATES, LLC

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Telephone (412) 942-2025 Fax (412) 942-2032

Email gregory.fino@stclair.org

Gregory J. Fino, MD, FCCP

January 22, 2007

Michael C. Colville Assistant U.S. Attorney U.S. Department of Justice U.S. Post Office & Courthouse 700 Grant Street, Suite 4000 Pittsburgh, PA 15219

RE: Michael Hill v. United States

C.A. No.03-323E SSN: 579-80-4585 DOB: 4-30-57 OIME: 1/3/07

Dear Attorney Colville:

I examined Mr. Hill on January 3, 2007.

Patient Profile

Mr. Hill was born in 1957 and is 49 years old.

His medications included:

- 1. Cozaar
- 2. Flomax
- 3. Nifedipine
- 4. Aspirin 1 low dose per day
- 5. Flexeril

He has used breathing medications off and on in the past. The last time was in 2005. It was apparently some type of inhaler.

Page 2 HILLM.DOJ

He smoked off and on at the rate of no more than 10 cigarettes per day and continued this habit over a 4 year span (1995 until 1999).

Occupational History

Mr. Hill worked for Unicor from August of 2002 until November of 2003. He helped cut Micore Board for the entire time he worked there. He said he was fired from that job because he complained about the work environment. He stated that the ventilation was not good, and he was offered a paper mask but not a respirator. He was also exposed to wood dust when he cut the particle board and to Lokweld, a glue used at Unicor.

Prior to 2002, he had no breathing problems. He did have some hay fever and post nasal drip. Early on in his work, he noted nasal congestion and some vertigo. He was diagnosed as having rhinitis. He did develop shortness of breath while he was working, and since leaving Unicor he is back to normal except that he does not have the stamina for running as he did before. When he was working, he noted a number of rashes and a lot of itching. He occasionally gets chest pain and he has had a few EKGs.

After the Micore board was removed from Unicor, Mr. Hill continued to have shortness of breath and a tightness in his chest; the chest tightness can occur at rest and with exertion.

He has a dry cough with little mucous production. He does wheeze.

He is also worried about developing silicosis down the road.

He notes that his hands and feet get numb, which he did not experience prior to 2002. He also has seen a rheumatologist, and he has a positive ANA, RNP and SSA.

He has had Raynaud's syndrome since 2004.

There is no orthopnea or paroxysmal nocturnal dyspnea.

Past Medical History

- 1. Hospitalized for broken left wrist in the 1960s; surgery was performed
- 2. Hospitalized for Hepatitis A about 1979

Page 3

HILLM.DOJ

- 3. Right shoulder surgery 2001
- 4. History of nephropathy, and he is positive for some type of connective tissue disorder
- 5. Has been on breathing medications in the past unsure of diagnosis
- 6. History of headaches "off and on"
- 7. History of sinus problems 2002 until 2004
- 8. As noted above, there is a history of Raynaud's disease; he has numbness in his hands and feet that is currently being evaluated by a rheumatologist.
- 9. Recently treated for Hepatitis C
- 10. On crutches at this time left foot injury

He has no history of pneumonia, tuberculosis, emphysema, asthma, bronchitis, bronchiectasis, or frequent colds. There is no history of fractured ribs.

Family History

There is no reported family history of lung disease, heart disease, or malignancy.

Review of Systems

Neurologic:

No seizures

GI:

No history of chronic gastrointestinal disease

CVS:

No history of cardiovascular disease

Endocrine:

No diabetes or thyroid disease

Physical Examination

General:

Well-developed, well-nourished African American in

no acute distress, oriented X 3

Heart Rate:

68

Blood Pressure:

121/76

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Respiratory Rate: 12

Height: 68" without shoes

Weight: 170 lbs without shoes

Skin/Nails: No cyanosis, clubbing, or edema

Neck: Supple with a midline trachea; no thyromegaly

HEENT: Unremarkable

Lungs: Clear to auscultation and percussion on a tidal volume

breath and a forced expiratory maneuver without

wheezes, rales, rhonchi, or rubs

Heart: Normal S1 and S2 without murmurs, gallops, or rubs

Abdomen: No organomegaly

Peripheral Pulses: 2+ and equal

Extremities: Cyanosis and erythema of the hands - consistent with

Raynaud's

Edema: Negative

Neurological Exam: Intact

Chest X-Ray

A two-view chest x-ray was performed in conjunction with this examination. The chest x-rays were compared to the revised 2000 ILO classification films.

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HILLM.DOJ

There were no pleural and no parenchymal abnormalities consistent with an occupationally acquired pneumoconiosis.

Classification:

0/0

Pulmonary Function Testing

The American Thoracic Society, in conjunction with the European Respiratory Society, has published a follow-up article to their 1991 article on selection of reference values and interpretative strategies in pulmonary function testing.

The original 1991 article is entitled <u>Lung Function Testing</u>: <u>Selection of Reference</u>
<u>Values And Interpretative Strategies</u> (AM REV RESPIR DIS 1991; 144:1202-1218). The more recent article is entitled <u>Interpretative Strategies for Lung Function Tests</u> (EUR RESPIR J 2005; 26:948-968).

The following consensus recommendations have been issued in the 2005 consensus statement:

- If the patient's age or height is outside the limits of the reference population, a statement in the interpretation should indicate that an extrapolation has been made.
- The practice of using 80% as a fixed value for the lower limit of normal can lead to important errors when interpreting lung function in adults. The practice of using 0.70 as a lower limit of the FEV1/FVC ratio results in a significant number of false positive results in males aged greater than 40 years and females greater than 50 years, as well as in a risk of over diagnosis of chronic obstructive pulmonary disease in asymptomatic elderly never smokers.
- ✓ Volume corrections should be made for African-Americans and Hispanics when measuring spirometry. Values for lung volumes are, on average, 12% lower in African-Americans than in Caucasians.
- Recommended spirometric reference equations come from the National Health and Nutrition Examination Survey (NHANES III) published in 1999 (AM J RESPIR CRIT CARE MED 1999; 159:179-187).

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HILLM.DOJ

- Recommended lung volume reference equations were published in 1995 (EUR RESPIR J 1995; 8:492-506).
- A single set of diffusing capacity reference values could not be recommended. There were two commonly used equations referenced, one of which has been utilized since its publication in 1981 (AM REV RESPIR DIS; 123:185-189).

The earlier consensus statement also recommended abandoning the 80% cut off as normal and the 70% cut off for the FEV1/FVC. The new 2005 statement paper goes one step further and has recommended utilization of one set of reference equations for spirometry, one for lung volumes and then one of two for the diffusing capacity. Having reviewed these new recommendations and having reviewed the source material, I believe that it is medically reasonable to follow the recommendations in the statement papers.

I have included with the pulmonary function studies that are performed in conjunction with my examinations a new summary for the spirometry, lung volumes and diffusing capacity. This summary utilizes the above noted recommendations for the spirometry, lung volume and diffusing capacity reference equations.

Spirometry

The spirometry was invalid because of a premature termination to exhalation and a lack of reproducibility in the expiratory tracings. There was also a lack of an abrupt onset to exhalation. The values recorded for this spirometry represent at least the minimal lung function that this man could perform and certainly not this man's maximum lung function. (References: (1) Standardization of Spirometry. A.R.R.D. 1987; 136:1285-1298. (2) ATS Statement-Snowbird Workshop on Standardization of Spirometry. A.R.R.D. 1979; 119:831-838. (3) Statement on Spirometry. Chest 1983; 83:547-550. (4) ATS/ERS Task Force: Standardization of Lung Function Testing - Standardization of Spirometry. Eur Respir J 2005; 26: 319-338.)

Lung Volumes

Normal FRC and RV.

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Diffusing Capacity

Mr. Hill was unable to complete DLCO testing.

Oxygen Saturation

Normal

Carboxyhemoglobin Level

Normal

Laboratory Results

Liver function and renal function studies were normal, and electrolytes were normal. There was a decrease in this man's white blood cell count and in his hemoglobin/hematocrit.

Medical Record Review

In conjunction with this evaluation, I also reviewed the following information:

- 1. Background information which included:
 - The Microbac Indoor Airy Quality Survey dated 7/31/01.
 - The Declaration of Michael Salerno, dated 1/19/05, with detailed information regarding the ventilation system.
 - The McKean timeline, which identified when and where the Plaintiff worked within the UNICOR Factory.
 - Material Safety Data Sheets for Micore Board and Lokweld.
 - The OSHA Inspection Report and supporting documentation.

Micore Board is a man-made product which contains man-made vitreous fiber, expanded perlite, starch, recycled paper, kaolin and crystalline silica.

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HILLM.DOJ

Lokweld is a sprayed grade adhesive used for laminate. It contains acetone, toluene, hexane isomers, and N-hexane.

In a letter dated August 20, 2003, Mr. Stranahan (from OSHA) discussed the results of air monitoring to evaluate worker exposures to airborne dust concentrations. He stated that the "results showed no worker's exposure exceeded 10% of the relevant exposure limit." He did recommend a number of steps that could be voluntarily taken to eliminate or further reduce the workers' exposure to dust. No respirable silica was measured.

- 2. A copy of the Fifth Amended Complaint filed on behalf of the Plaintiff.
- 3. The Declaration of Doris M. Williams, M.D., dated 4/20/04.
- 4. The Declaration of Stephen Housler, Safety Manager, dated 1/25/06.
- 5. The Declarations of Martin Sapko, Factory Manager, dated 1/25/06.
- 6. The Declaration of Debora Forsyth, Associate Warden, dated 1/30/06.
- 7. The Declaration of Douglas S. Goldring, Assistant General Counsel, dated 2/9/06, which included information from the Bureau of Corrections' medical file on Mr. Hill with notations between January of 2000 and January of 2006.
- 8. A transcript of the video deposition of Michael Hill dated 11/1/06.
- 9. In addition to the information noted above, I also had an opportunity to review miscellaneous records on CD ROMS that accompanied the files forwarded to my office.

Included in the medical records noted above were rheumatology evaluations. I would note that there was a history of Raynaud's phenomenon, hepatitis C, a positive RNP antibody and a low complement level.

Diagnoses

- 1. Normal Pulmonary Examination
- 2. Probable connective tissue disease and hepatitis C

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HILLM.DO.

Discussion

I found no evidence of a respiratory impairment or disability. This man's spirometry was invalid. When lung volumes were performed, the TLC and RV/TLC were also invalid, while the FRC and RV were normal.

The determination of pulmonary impairment and subsequent disability has been extensively researched in the American medical literature. In the late 1980s, there was a worldwide conference on the assessment of respiratory impairment sponsored by the National Institutes of Health. This was published in the American Review of Respiratory Disease in 1988 (ARRD 1988; 137:1505-1510). All of the participants agreed that symptoms of shortness of breath on effort and exercise intolerance were not reliable predictors of impairment. There was also agreement that a physical examination was not helpful in measuring pulmonary impairment. Lung function tests, however, were essential in assessing whether or not impairment was present and essential in rating its severity. Dr. Hans Weill commented that "resting lung function tests, usually spirometry, all are the cornerstone in the clinician's assessment of respiratory impairment, and provided they are technically sound, are generally believed to be adequate for ascertaining the presence of respiratory limitation. Likewise, it is generally believed that exercise limitation is not likely to be present in the face of normal or marginal resting lung function."

Similar statements have been issued by the American Thoracic Society and the American Medical Association with respect to guidelines for the evaluation of respiratory impairment. It is of utmost importance that valid lung function studies be performed. An invalid study does not represent the patient's maximum pulmonary capacity and cannot be used to assess impairment or disability. An invalid pulmonary function study indicates poor patient effort. The values recorded can only represent the minimum lung function of the patient.

There is no evidence of either chronic or accelerated silicosis based on the normal chest films.

This patient should have no fear of contracting silicosis in the future. First of all, there were no measurable levels of respirable silica noted by OSHA. Furthermore, it is well documented in the medical literature that at least 20 years of exposure to dust that is measurable and above the PEL is required before chronic silicosis occurs.

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If Mr. Hill were my patient, I would not follow him for the subsequent development of silicosis, and I would assure him that he has no reason to worry about developing silicosis in the future.

I also found no evidence of any chronic condition with reference to his eyes or throat or skin.

I would point out that this man had recently injured his foot shooting baskets. If he really had the lung function suggested by the invalid spirometry, there is no way that he could be shooting baskets.

Conclusions

My conclusions have been reached with a reasonable degree of medical certainly. I find no evidence of any chronic condition of the lungs or pulmonary system related to Mr. Hill's alleged exposures. I find no evidence of a chronic condition with reference to the skin, eyes or nose.

Sincerely,

Gregory J. Fino, M.D., F.C.C.P.

GJF/kms

CLINICAL AND OCCUPATIONAL PULMONARY ASSOCIATES

GREGORY J. FINO, M.D., F.C.C.P.

PREDICTED VALUES BASED ON THE 2005 SPIROMETRY RECOMMENDATIONS Recommendations from the ATS/ERS: INTERPRETATIVE STRATEGIES FOR LUNG FUNCTION TESTS EUR RESPIR J 2005: 26:948-968.

Name	Hill, N	/lichael	MD	Fino				
Ht	172.7	cm	Date	1/3/2007				
Age	49	years	Race	African American				

SPIROMETRY PREDICTED VALUES USING THE NHANES III STUDY

Spirometric Reference Values from a Sample of the General U.S. Population

AM J RESPIR CRIT CARE MED 1999; 159:179-187

TEST	PATIENT	PRED	%PRED	LLN	LLN%	POST	%PRED	BD %	
FVC	3.49	3.92	89	3.03	77	3.75	96	7	
FEV1	2.10	3.14	67	2.36	75	2.76	88	31	
FEV1/FV0	60	80		70		74			
						•			
FEF25-75	1.55	3.19	49	1.51	47	2.57	81	66	

REFERENCE VALUES FOR RV,FRC AND TLC - ATS WORKSHOP ON LUNG VOLUME MEASUREMENTS OFFICIAL STATEMENT OF THE EUROPEAN RESPIRATORY SOCIETY EUR RESPIR J 1995: 8:492-506

L.V.	PATIENT	PRED	%PRED	LLN	LLN%	ULN	ULN%	
TLC	3.75	5.91	63	4.71	80	8.09	137	
RV	2.42	1.86	130	1.27	68	2.78	150	
FRC	2.84	3.03	94	2.16	71	4.43	146	
RV/TLC%	65	33	196	22	68	44	132	

Prebronchodilator

FVC

FEV1 FEV1/FVC

FEF25-75

Post Bronchodikator **FVC**

FEV1

Lung Volumes

FRC N

TLC INV RV N

RV/TLC ₩

IMPRESSION

egory J. Fino, M.D.

PRI	E	POST					
FVC	3.49	FVC	3.75				
FEV1	2.1	FEV1	2.76				
FEV1/FVC	60	FEF25-75	2.57				
FEF25-75	1.55	PR	E.				
TLC	3.75	RV/TLC%	65				
RV	2.42						
FRC	2.84						

Pulmonary Function Report

1000 Bower Hill Rd. Pittsburgh, PA, 15243

Phone: 412-942-2000

Fax: 412-942-2024

Name	Hill, Michael		ID:	882026	D.O.B.	:04/30/1957	Date:	01/03/2007
Tech:	Diane Smith, CRT	•	Height:	68.00	Age:	49	Room:	Out Patient
Doctor:	G. Fino, M.D.		Weight:	170.00	Sex:	Male	Race:	Black

Diagnosis:

Dyspnea:

Cough:

Wheeze:

Tbco Prod:

Yrs Smk:

Pks/Day:

Yrs Quit:

Medications:

Pre Test Comments:

Post Test Comments:

PFT Authors DLCO (Crapo), FVC (Nhanes III), FRC (ECCS) The results of this test are questionable due to the patient's inability to perform the maneuvers according to the ATS standards. Patient unable to complete DLCO testing Albuterol MDI 2 puffs given for part branch diluter EVC.

given for post bronchodilator FVC.

	Pre	-Bronch		Post-Bronch			
	<u>Actual</u>	Pred	%Pred	Actual	%Pred	%Chng	
SPIROMETRY							
FVC (L)	3.49	4.34	80	3.75	86	7	
FEV1 (L)	2,10	3.54	59	2.76	78	31	
FEV1/FVC (%)	60	80	75	74	92	22	
FEF 25% (L/sec)	1.41	7.36	19	3.82	52	170	
FEF 75% (L/sec)	0.83	1.74	48	1.54	88	84	
FEF 25-75% (L/sec)	1.55	3.70	42	2.57	69	66	
FEF Max (L/sec)	2.12	8.53	25	3.83	45	80	
FIVC (L)	2.85			2.52	-	-12	
FIF Max (L/sec)	1.26			1.55	•	24	
LUNG VOLUMES							
SVC (L)	1.32	4.65	28	2.67	57	102	
IC (L)	0.91	3.26	28	1.83	56	102	
ERV (L)	0.41	1.39	30	0.84	· 60	103	
FRC (N2) (L)	2.84	3.30	86	•			
RV (N2) (L)	2.42	1.91	127				
TLC (N2) (L)	3.75	6.56	57				
RV/TLC (N2) (%)	65	29	223				
Washout Time (min)	5.49						

Pulmonary Function Report

1000 Bower Hill Rd. Pittsburgh, PA, 15243

Phone: 412-942-2000 Fax: 412-942-2024

Hill, Michael Name Tech: Diane Smith, CRT Doctor: G. Fino, M.D.

ID: 882026 Height: 68.00

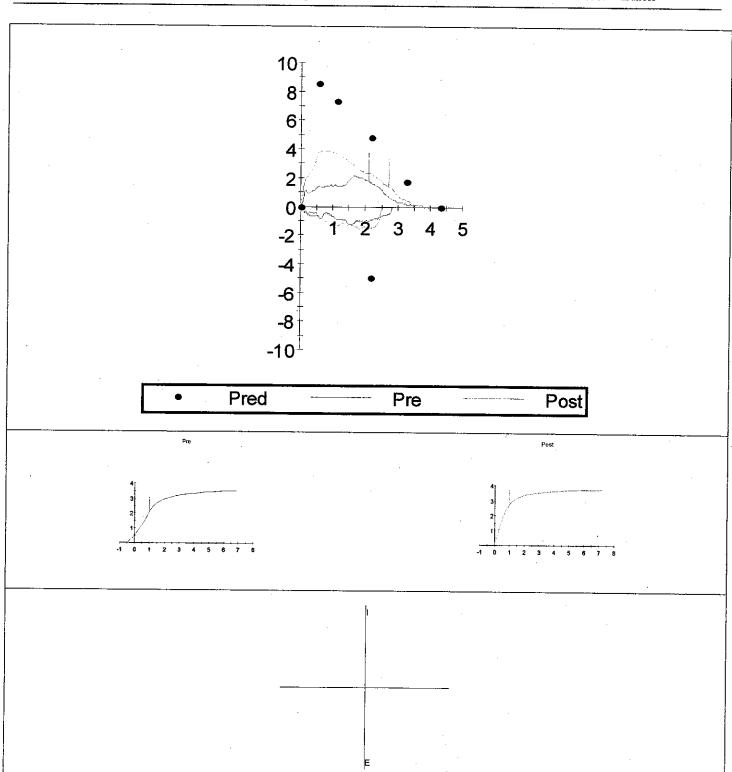
D.O.B.: 04/30/1957 Age: 49

Room: Out Patient

01/03/2007

Date:

Weight: 170.00 Sex: Male Race: Black

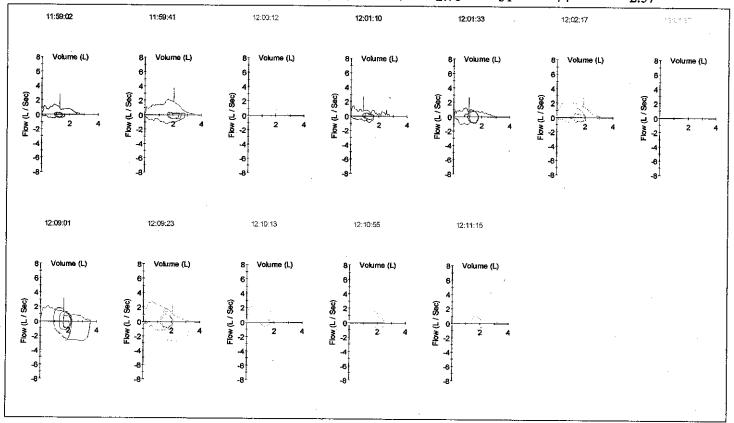


Pulmonary Function Report

1000 Bower Hill Rd. Pittsburgh, PA, 15243

		Phone: 412-942-20	00 Fax: 41	2-942-2024		
Name	Hill, Michael	ID:	882026	D.O.B.: 04/30/1957	Date:	01/03/2007
Tech:	Diane Smith, CRT	Height:	68.00	Age: 49	Room:	Out Patient
Doctor:	G. Fino, M.D.	Weight:	170.00	Sex: Male	Race:	Black

Time	Select	I-Lp	Test Mode	ATS	ENT/O		**************************************	TYPY		
					FVC	FVC	FEV1			FEF 25-75%
Pre					absolute	% p/c	absolute	% p/c	absolute	absolute
	4									
11:59:41	*			back e	3.49	80	2.10	59	60	1.55
12:02:17	. *				3.25	75	1.93	54	59	1.47
12:00:12	*			back e	2.92	67	1.65	47	57	1.26
12:01:33	*			back e	2.91	67	1.13	32	39	0.75
11:59:02	*			back e	2.74	63	1.31	37	48	0.89
12:01:10	*				2.74	63	0.90	25	33	0.47
Composite)	Pre/Baseline		3.49	80	2.10	59	60	1.55
Post										
12:10:55	*				3.75	+7	2.76	+31	74	2.57
12:11:15	*			•	3.30	-5	2.26	. +8	69	1.87
12:09:23	*				3.30	-6	2.08	-1	63	1.24
12:09:01	*				3.58	+2	1.69	-19	47	1.13
12:10:13	*				3.05	-13	1.74	-17	57	0.92
12:08:37	*				2.93	-16	1.56	-25	53	0.93
ATS		1	Post		3.75	+7	2.76	+31	74	2.57



Pulmonary Function Report

1000 Bower Hill Rd. Pittsburgh, PA, 15243

Phone: 412-942-2000

Fax: 412-942-2024

Name: Tech:

Hill, Michael Diane Smith, CRT

Doctor: G. Fino, M.D.

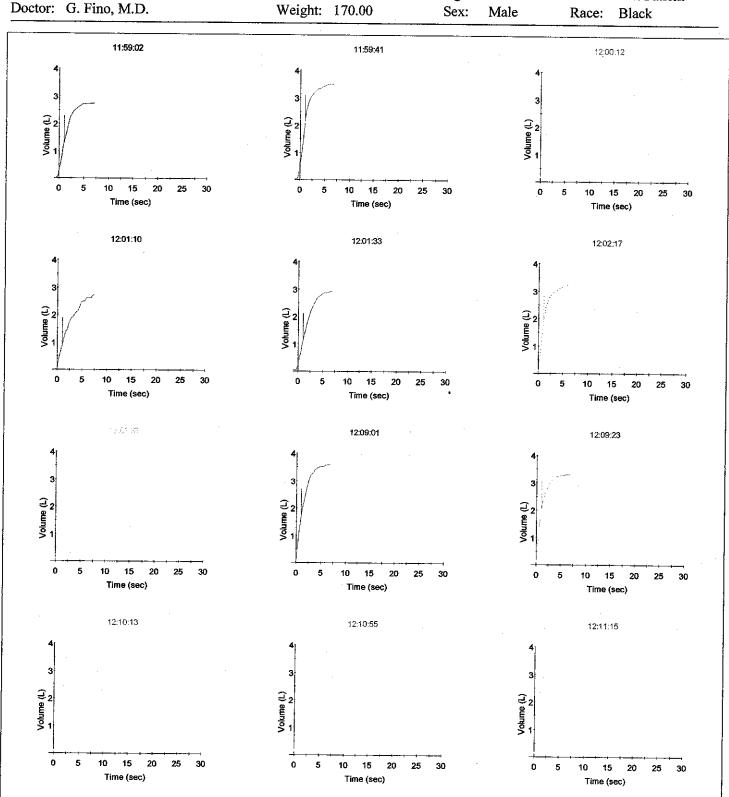
ID: Height:

882026 68.00

D.O.B.: 04/30/1957 Age: 49

Sex: Male Date: 01/03/2007 Room: Out Patient

Race: Black

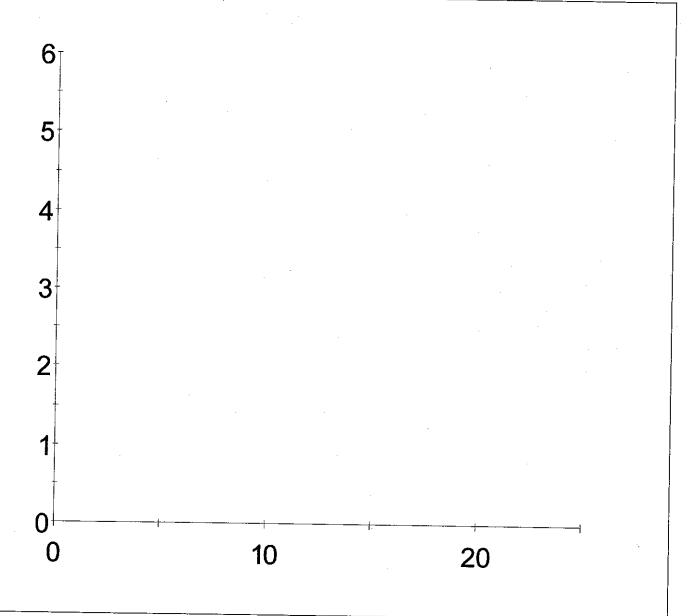


Pulmonary Function Report

1000 Bower Hill Rd. Pittsburgh, PA, 15243

	Phone: 412-942-2000	Fax: 412-942-2024		
Name Hill, Michael Tech: Diane Smith, CRT			3.:04/30/1957 Date:	01/03/2007
Doctor: G. Fino, M.D.	Height: 68. Weight: 170	5	1.0011	: Out Patient Black

Time	Select	RpLp	Test Mode	Codes	Protocol					
						DLCOunc	DL/VA			
Predicted Pre						absolute 29.64	% p/c	absolute 34.22	% p/c	absolute 5.41
Post										,
12:16:20			-	Inspirat J	Jones-Mea	24.95	??	•	?? ??	5.32
AVG		1	Post				??			



St. Clair Hospital

Pulmonary Function Report

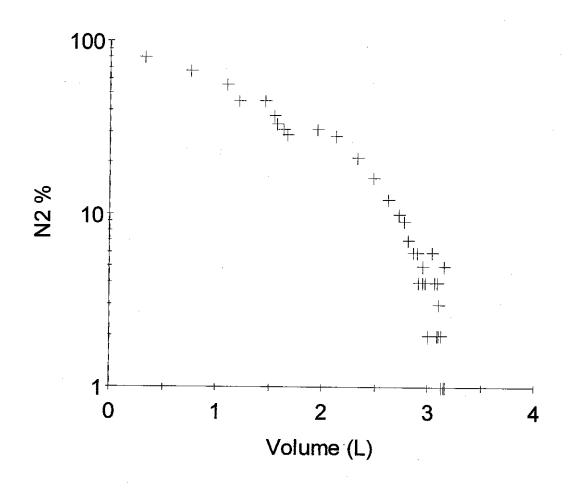
1000 Bower Hill Rd. Pittsburgh, PA, 15243

Was .			
Phone:	412-942-2000	Fax:	412-942-2024

	TT101 % 4						
Name:	Hill, Michael	ID:	882026	D.O.B.	: 04/30/1957	Date:	01/03/2007
Tach	Diane Smith, CRT	TT-1-1-4.					
ı con.	Diane Simul, CKI	Height:	08.00	Age:	49	Room:	Out Patient
Doctor	G. Fino, M.D.	Weight:	170.00	Carre	Mala		
Doctor.	G. I IIIO, MI.D.	W CIRILE.	170.00	Sex:	Male	Race:	Black

Time	Select	RpLp	Test Mode					
	·			FRC (N2) absolute	FRC (N2) % p/c	RV (N2) absolute	RV (N2) % p/c	TLC (N2) absolute
Predicted				3.30	•	1.91	F. 4	6.56
Pre								
11:49:53				17.15	520	16.74	876	18.06
11:56:45	*			2.84	86	2.42	127	3.75
AVG			Pre/Baseline	2.84	86	2.42	127	3.75
Post						4		

11:56:45



HILL, MICHAEL

MR#:882026 SEX:M AGE:49Y BIRTH:04/30/1957

DOCTOR: FINO, GREGORY J., M.D.

1000 BOWER HILL RD. SUITE 211

PITTSBURGH PA 15243

ST CLAIR HOSPITAL LABORATORY

1000 BOWER HILL ROAD PITTSBURGH, PA 15243

MARTHA R. CLARKE, MD, MEDICAL DIRECTOR

W6762 COLL: 01/03/2007 10:41 REC: 01/03/2007 10:44

	COMP METABOLIC			
	SGOT/AST	30	[0-50]	U/L
	SGPT/ALT	19	[0-50]	U/L
	ALKALINE PHOSPHAT		[43-122]	U/L
	BILIRUBIN TOTAL	0.3	[0.2-1.3]	MG/DL
	PROTEIN	7.6	[6.0-8.4]	G/DL
	ALBUMIN	3.7	[3.5-5.0]	G/DL G/DL
	CALCIUM	8.8	[8.0-10.2]	MG/DL
	GLUCOSE	94	[70-110]	MG/DL MG/DL
	BUN	9	[8-25]	MG/DL MG/DL
	CREATININE	0.8	[0.6-1.5]	MG/DL MG/DL
	GFR (CAUCAS/OTHER)	>59	[>59]	ML/MIN
	GFR (AFRICAN AMER)	>59	[>59]	ML/MIN
	SODIUM	142	[133-145]	MMOL/L
	POTASSIUM	4.0	[3.5-5.0]	MMOL/L
	CHLORIDE	107	[96-108]	MMOL/L
	CO2	29	[22-30]	MMOL/L
	ANION GAP	@6	[8-16]	MMOL/L
			[0 10]	144011/11
	CBC HEMOGRAM			
	WBC	@2.5	[4.8-10.8]	K/UL
	RBC	@4.63	[4.7-6.2]	M/UL
	HEMOGLOBIN	@13.4	[14.0-17.0]	GM/DL
	HEMATOCRIT	@38.8	[42.0-52.0]	9
	MCV	83.9	[78.0-94.0]	FL
	MCH	28.9	[25.0-35.0]	PG
	MCHC	34.5	[31.0-36.5]	G/DL
	RDW	13.4	[12.9-14.9]	%
	PLATELET	151	[130-460]	K/UL
	MPV	@7.2	[7.4-10.4]	FL
,	DIER BIROMPONIA			
,	DIFF, ELECTRONIC	0.5		
	ABSOLUTE NEUTROPH		[1.5-6.6]	K/UL
	ABSOLUTE LYMPHOCY		[1.5-3.5]	K/UL
	ABSOLUTE MONOCYTE	0.2	[0-0.9]	K/UL
	ABSOLUTE EOSINOPH	0.1	[0-0.6]	K/UL
	ABSOLUTE BASOPHIL	0.0	[0-0.1]	K/UL
	NEUTROPHIL	42.2	[40-75]	8
	LYMPHOCYTE	@47.6	[20-40]	ે
	MONOCYTE EOSINOPHIL	7.5	[1-8]	용
	BASOPHIL	2.4	[0-5]	8
	DADOPALL	0.2	[0-1]	ક

PAGE:1

FINO, GREGORY J., M.D. 1000 BOWER HILL RD. SUITE 211 PITTSBURGH PA 15243 1TIME

* = CRITICAL VALUE

@ = OUTSIDE NORMAL RANGE
END OF REPORT

CLINICAL & OCCUPATIONAL PULMONARY ASSOCIATES, LLC

Gregory J. Fino, MD, FCCP

St. Clair Hospital 1000 Bower Hill Road, Suite 211 Pittsburgh, Pennsylvania 15243-1899

Telephone (412) 942-2025
Fax (412) 942-2032
Email gregory.fino@stclair.org

PATIENT HILL, MICHAEL

PULSE OXIMETRY LA

CC = 3 ppm $O \cdot G COHb$

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January 22, 2007

Michael C. Colville Assistant U.S. Attorney U.S. Department of Justice U.S. Post Office & Courthouse 700 Grant Street **Suite 4000** Pittsburgh, PA 15219

RE: Leslie Kelly v. United States

> C.A. No. 03-368E SSN: 363-90-8006 DOB: 12/17/62

OIME: 1/16/07

Dear Attorney Colville:

I examined Mr. Kelly on January 16, 2007.

Patient Profile

Mr. Kelly was born in 1962 and was 44 years old.

His medications included:

- 1. Medication to control high cholesterol
- One aspirin per day for his heart 2.
- Has used nasal spray "off and on" for "sores in my nose" the last time was a 3. couple of months ago

He has never used any inhalers for breathing.

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KELLYL DOJ

He smoked 3-4 cigarettes per day from 1981 until about 2005, but he stopped on more than one occasion. He estimates that he smoked for about 18 years.

Occupational History

Mr. Kelly worked at Unicor for about 9 months, from August of 2002 through April of 2003. He helped with the drilling of the Micore board and was ten feet from the cutting of the Micore board. Therefore, he was exposed to a lot of dust. He was also exposed to the dust from cutting particle board, and fumes from a glue used for the laminate - Lokweld. He was provided paper masks, but used them infrequently.

He denied any breathing problems prior to working at Unicor. He noticed breathing problems, nasal congestion and persistent headaches after he had been working there for about 6 months. He also noted some coughing. He noted pruritis and a rash on his hands. He also noted epistaxis.

Since he stopped working, the headaches are gone. He still has nosebleeds, and he still awakens at night breathless. He has also noted some spitting up of blood for the last couple of years.

Past Medical History

- 1. Hospitalized for pneumonia as a child
- 2. Gunshot wound to right shoulder and another to his back about 1986
- 3. Was told he was a "borderline" diabetic about 1986
- 4. Has been on medication for cholesterol control since 2003
- 5. History of headaches in 2003 initially on a daily basis, but infrequently now
- 6. Has been spitting up blood for about 2 years occurs almost on a daily basis; he has had blood work done, but he does not know the results
- 7. Currently under evaluation for chest pain has had a treadmill test
- 8. As noted above, he has problems sometimes "catching his breath" when he wakes up at night has been evaluated, but diagnosis unknown.
- 9. Believes he has a history of sinus problems often has a runny nose

He has no history of tuberculosis, emphysema, asthma, bronchitis, bronchiectasis, or frequent colds. There is no history of fractured ribs.

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KELLYL.DOJ

Family History

There is no family history of lung disease or malignancy. His mother had high blood pressure.

Review of Systems

Neurologic:

No seizures

GI:

No history of chronic gastrointestinal disease

GU:

No chronic genitourinary problems

MS:

No chronic musculoskeletal problems

Endocrine:

No thyroid disease

Physical Examination

General:

Well-developed, well-nourished African American

man in no acute distress, oriented X 3

Heart Rate:

64

Blood Pressure:

119/70

Respiratory Rate:

14

Height:

70" without shoes

Weight:

192 lbs without shoes

Skin/Nails:

No cyanosis, clubbing, or edema. His skin was

generally dry and I noted no rash.

Neck:

Supple with a midline trachea; no thyromegaly

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KELLYL.DOJ

HEENT:

Unremarkable without abnormalities

Lungs:

Clear to auscultation and percussion on a tidal volume

breath and a forced expiratory maneuver without

wheezes, rales, rhonchi, or rubs

Heart:

Normal S1 and S2 without murmurs, gallops, or rubs

Abdomen:

No organomegaly

Peripheral Pulses:

2+ and equal

Extremities:

Negative

Edema:

Negative

Neurological Exam:

Intact

Chest X-Ray

A two-view chest x-ray was performed in conjunction with this examination. The chest x-rays were compared to the revised 2000 ILO classification films.

I have also received for review the following radiographic studies, and I have compared all of the chest x-rays to the revised 2000 ILO classification films:

- 1. A Quality 3 AP portable film dated 5/24/04 performed at The Federal Transfer Center.
- 2. A Quality 3 AP portable film dated 8/20/04 performed at an unknown facility.

There were no pleural and no parenchymal abnormalities consistent with an occupationally acquired pneumoconiosis, and I classified all of the above-referenced chest x-rays as 0/0. There was evidence of metallic fragments over the right upper chest and right shoulder.

Document 79-3

Leslie Kelly January 22, 2007 Page 5

KELLYL DOJ

Pulmonary Function Testing

The American Thoracic Society, in conjunction with the European Respiratory Society, has published a follow-up article to their 1991 article on selection of reference values and interpretative strategies in pulmonary function testing.

The original 1991 article is entitled Lung Function Testing: Selection of Reference Values And Interpretative Strategies (AM REV RESPIR DIS 1991; 144:1202-1218). The more recent article is entitled Interpretative Strategies for Lung Function Tests (EUR RESPIR J 2005; 26:948-968).

The following consensus recommendations have been issued in the 2005 consensus statement:

- If the patient's age or height is outside the limits of the reference population, a statement in the interpretation should indicate that an extrapolation has been made.
- The practice of using 80% as a fixed value for the lower limit of normal can lead to important errors when interpreting lung function in adults. The practice of using 0.70 as a lower limit of the FEV1/FVC ratio results in a significant number of false positive results in males aged greater than 40 years and females greater than 50 years, as well as in a risk of over diagnosis of chronic obstructive pulmonary disease in asymptomatic elderly never smokers.
- / Volume corrections should be made for African-Americans and Hispanics when measuring spirometry. Values for lung volumes are, on average, 12% lower in African-Americans than in Caucasians.
- Recommended spirometric reference equations come from the National Health and Nutrition Examination Survey (NHANES III) published in 1999 (AM J RESPIR CRIT CARE MED 1999; 159:179-187).
- Recommended lung volume reference equations were published in 1995 (EUR RESPIR J 1995; 8:492-506).
- A single set of diffusing capacity reference values could not be recommended. ✓. There were two commonly used equations referenced, one of which has been utilized since its publication in 1981 (AM REV RESPIR DIS; 123:185-189).

Leslie Kelly January 22, 2007 Page 6

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The earlier consensus statement also recommended abandoning the 80% cut off as normal and the 70% cut off for the FEV1/FVC. The new 2005 statement paper goes one step further and has recommended utilization of one set of reference equations for spirometry, one for lung volumes and then one of two for the diffusing capacity. Having reviewed these new recommendations and having reviewed the source material, I believe that it is medically reasonable to follow the recommendations in the statement papers.

I have included with the pulmonary function studies that are performed in conjunction with my examinations a new summary for the spirometry, lung volumes and diffusing capacity. This summary utilizes the above noted recommendations for the spirometry, lung volume and diffusing capacity reference equations.

Spirometry

Normal spirometry. He did not give a maximal effort; had he done so, the values would have been even higher.

Lung Volumes

The lung volume study was technically invalid due to poor effort. The values are not accurate.

Diffusing Capacity

The diffusing capacity was invalid because the inspiratory vital capacity was less than 90% of the forced vital capacity. However, when taking into consideration alveolar volume, the diffusing capacity was normal.

Oxygen Saturation

Normal

Carboxyhemoglobin Level

Normal

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KELLYL.DOJ

Laboratory Results

Liver panel, renal panel, and a complete blood count were normal.

Medical Record Review

In conjunction with this evaluation, I also reviewed the following records:

- 1. Background information which included:
 - The Microbac Indoor Airy Quality Survey dated 7/31/01.
 - The Declaration of Michael Salerno, dated 1/19/05, with detailed information regarding the ventilation system.
 - The McKean timeline, which identified when and where the Plaintiff worked within the UNICOR Factory.
 - Material Safety Data Sheets for Micore Board and Lokweld.
 - The OSHA Inspection Report and supporting documentation.

Micore Board is a man-made product which contains man-made vitreous fiber, expanded perlite, starch, recycled paper, kaolin and crystalline silica.

Lokweld is a sprayed grade adhesive used for laminate. It contains acetone, toluene, hexane isomers, and N-hexane.

In a letter dated August 20, 2003, Mr. Stranahan (from OSHA) discussed the results of air monitoring to evaluate worker exposures to airborne dust concentrations. He stated that the "results showed no worker's exposure exceeded 10% of the relevant exposure limit." He did recommend a number of steps that could be voluntarily taken to eliminate or further reduce the workers' exposure to dust. No respirable silica dust was measured.

2. A copy of the Amended Complaint.

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- 3. The Declaration of Eduardo F. Limonta, Health services Administrator, dated 5/2/05, with the Plaintiff's attached medical file through mid-April 2005.
- The Declaration of Stephen Housler, Safety Manager, dated 5/9/05. 4.
- The Declarations of Martin Sapko, Factory Manager, dated 5/10/05 and 1/25/06. 5.
- The Declaration of Douglas S. Goldring, Assistant General Counsel, dated 6. 1/27/06, including copies of the Plaintiff's medical file through January of 2006.
- The Declaration of Debora Forsyth, Associate Warden, dated 1/30/06. 7.
- The transcript of Mr. Kelly's deposition dated 10/31/06. 8.
- 9. In addition to the information noted above, I also had an opportunity to review miscellaneous records on CD ROMS that accompanied the files forwarded to my office.

Diagnosis

Normal Pulmonary Examination

Discussion

I find no evidence of a respiratory impairment or disability. This man's spirometry and diffusing capacity were both normal.

The determination of pulmonary impairment and subsequent disability has been extensively researched in the American medical literature. In the late 1980s, there was a worldwide conference on the assessment of respiratory impairment sponsored by the National Institutes of Health. This was published in the American Review of Respiratory Disease in 1988 (ARRD 1988; 137:1505-1510). All of the participants agreed that symptoms of shortness of breath on effort and exercise intolerance were not reliable predictors of impairment. There was also agreement that a physical examination was not helpful in measuring pulmonary impairment. Lung function tests, however, were essential in assessing whether or not impairment was present and essential in rating its severity. Dr. Hans Weill commented that "resting lung function tests, usually spirometry, all are the

Leslie Kelly January 22, 2007 Page 9

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cornerstone in the clinician's assessment of respiratory impairment, and provided they are technically sound, are generally believed to be adequate for ascertaining the presence of respiratory limitation. Likewise, it is generally believed that exercise limitation is not likely to be present in the face of normal or marginal resting lung function."

Similar statements have been issued by the American Thoracic Society and the American Medical Association with respect to guidelines for the evaluation of respiratory impairment. It is of utmost importance that valid lung function studies be performed. An invalid study does not represent the patient's maximum pulmonary capacity and cannot be used to assess impairment or disability. An invalid pulmonary function study indicates poor patient effort. The values recorded can only represent the minimum lung function of the patient.

There is no evidence of either chronic or accelerated silicosis based on the normal chest films.

This patient should have no fear of contracting silicosis in the future. First of all, there were no measurable levels of respirable silica noted by OSHA. Furthermore, it is well documented in the medical literature that at least 20 years of exposure to dust that is measurable and above the PEL is required before chronic silicosis occurs.

If this were my patient, I would not follow Mr. Kelly for the subsequent development of silicosis, and I would assure him that he has no reason to worry about developing silicosis in the future.

I find no evidence of any chronic condition with reference to his eyes or throat or skin.

Conclusions

My conclusions have been reached with a reasonable degree of medical certainly. I find no evidence of any chronic condition of the lungs or pulmonary system related to his alleged exposures. I find no evidence of a chronic condition with reference to the skin, eyes or nose.

Sincerely,

Gregory J. Fino, M.D., F.C.C.P.

CLINICAL AND OCCUPATIONAL PULMONARY ASSOCIATES

GREGORY J. FINO, M.D., F.C.C.P.

PREDICTED VALUES BASED ON THE 2005 SPIROMETRY RECOMMENDATIONS Recommendations from the ATS/ERS: INTERPRETATIVE STRATEGIES FOR LUNG FUNCTION TESTS EUR RESPIR J 2005; 26:948-968

			999 targer open green and a service of		•
Name	Kelly,	Leslie	MD	Fino	
H	177.8	cm	Date	1/16/2007	
Age	44	years	Race	African American	
0 To Table 10 To Table 1					

SPIROMETRY PREDICTED VALUES USING THE NHANES III STUDY

Spirometric Reference Values from a Sample of the General U.S. Population

AM J RESPIR CRIT CARE MED 1999; 159:179-187

100 mm			HI O KESSI IK	CILLUA	KE MED 19
TEST	PATIENT	PRED	%PRED	LLN	LLN%
FVC	4.10	4.31	95	3.37	78
				··	
FEV1	3.38	3.50	97	2.66	76
a distanti	_				
FEV1/FVC	82	81		71	
FEF25-75	3.91	3.59	109	1.81	50

REFERENCE VALUES FOR RV,FRC AND TLC - ATS WORKSHOP ON LUNG VOLUME MEASUREMENTS OFFICIAL STATEMENT OF THE EUROPEAN RESPIRATORY SOCIETY EUR RESPIR 1 1005, 9,402 506

BEST AND A PROPERTY OF THE PRO	ECK RESI IX J 1995; 0:492-500										
L.V. PATIENT PRED %PRED LLN LLN	% ULN ULN%										
TLC 7.65 6.27 122 5.07 81	8.50 135										
RV 3.47 1.82 191 1.23 68											
FRC 4.95 3.09 160 2.22 72	4.50 146										
RV/TLC% 45 31 144 20 66	42 134										

STANDARDIZED SINGLE BREATH NORMAL VALUES FOR THE DLCO AM REV RESDID DIG 1001,122,105 100

THE PERSON NAMED OF THE PE	Streetscooper	PRODUCTION OF THE PRODUCTION O		KESLIK D	129 TA9T?	145:185-18	89
DLCO PAT	IENT	PRED	%PRED	LLN	LLN%		
DLCO 24	1.31	33.43	73	26.21	78		
DL/VA 4	.27	4.91	87	3.68	75		

Prebronchodilator

NOR MAL **FVC** FEV1 FEV1/FVC FEF25-75

Diffusing Capacity

DLCO - INIALIA DL/VA - NORMAL

IMPRESSION

INVALID Lung Volumes **FRC** TLC RV RV/TLC

FVC	4.1	7	
FEVI	3.38	7	
FEVI/FVC	82		
FEF25-75	3.91	PR	E
TLC	7.65	RV/TLC%	45
RV	3.47	DLCO	24.31
FRC	4.95	DL/VA	4.27

PRE

Gregory J. Fino, M.D.

St. Clair Hospital

Pulmonary Function Report

1000 Bower Hill Rd. Pittsburgh, PA, 15243

Phone: 412-942-2000								
Name:	Kelly, Leslie	ID:	882590	D.O.B.: 12/17/1962	Date:	01/16/2007		
Tech:	T. Zeman, CRT, RPsgT.	Height:	70.00	Age: 44	Room:	Outpatient		
Doctor:	G. Fino, M.D.	Weight:	192.00	Sex: Male	Race:	Black		

Diagnosis: SOB

Dyspnea: After severe exertion

Cough: Productive

Wheeze: No Wheeze

0.3

Tbco Prod: Cigarette

Yrs Smk: 18.0 Pks/Day:

Yrs Quit:

2.0

Medications:

Pre Test Comments:

Post Test Comments:

Good patient effort and cooperation Patient met ATS standards. PFT Authors DLCO

(Crapo), FVC (Nhanes III), FRC (ECCS)

	Pr	Pre-Bronch			Post-Bronch		
	<u>Actual</u>	<u>Pred</u>	%Pred	<u>Actual</u>	%Pred	%Chng	
SPIROMETRY							
FVC (L)	4.10	4.31	95				
FEV1 (L)	3.38	3.50	97				
FEV1/FVC (%)	82	81	102				
FEF 25% (L/sec)	4.70	7.92	59				
FEF 75% (L/sec)	1.72	2.02	85				
FEF 25-75% (L/sec)	3.91	3.59	109				
FEF Max (L/sec)	6.13	9.07	68				
FIVC (L)	2.72		•				
FIF Max (L/sec)	2.66				•		
LUNG VOLUMES							
SVC (L)	4.18	5.03	83				
IC (L)	2.70	3.44	78				
ERV (L)	1.48	1.59	93				
FRC (N2) (L)	4.95	3.47	143				
RV (N2) (L)	3.47	2.07	168				
TLC (N2) (L)	7.65	7.13	107				
RV/TLC (N2) (%)	7.03 45	7.13 31	146				
Washout Time (min)	2.47	31	140				
washout time (min)	2.47						
DIFFUSION							
DLCOunc (ml/min/mmHg)	24.31	37.99	64				
DLCOcor (ml/min/mmHg)		37.35	-				
DL/VA (ml/min/mmHg/L)	4.27	5.58	77				
VA (L)	5.69	6.94	82			-	
IVC (L)	3.91						
BHT (sec)							